

HABITAT

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they came to call it *ofeka yonjala*, 'The Hungry Country' or better 133
 'The Country of Hunger', since it was without inhabitants and 167
 consequently without the possibility of purchasing provisions.¹
 Much of the soil in all three of these adjoining regions is very [134]
 sandy and comparatively unproductive.

Many rivers find in the Benguela Highland a great catchment 133
 basin. The two largest are the Kuanza (Kuanja) and the Cunene
 (Kunene), both flowing into the Atlantic. Between them are the
 Queve (Keve, also marked 'Cuvo'), the Balombo, and the Catum-
 bela (Katombela), which also reach the ocean. A peculiar stream
 is the Cubango (Kuvango or Okavango), which rises near the
 source of the Cunene, and after becoming a great and free-flowing
 river loses itself in the Kalahari desert. Some authorities hold
 that through the Chobe swamp it maintains a seasonal connexion
 with the Zambezi. In this event the springs of the Benguela
 Highland feed the waters of both oceans. The part played by the
 Mbuluvulu plain in Bié (Viye) has often been noted by travellers
 and writers, for it drains into the Kuanza and also into the Cubango.
 As with most of the Southern Bantu,² rivers have had little direct-
 ly to do with building the material culture of the Ovimbundu.
 Watersheds have furnished trade-routes, and fishing has become [226]
 a side-line occupation for those who live conveniently near the
 streams. The rivers themselves, however, have always been of the
 greatest importance to the mass of the people who are dependent
 upon them for water, whether it comes in the form of rainfall or
 is taken more directly from the streams.

Climate

The regions under consideration in this study belong to the 132
 South Central African zone of summer rains. Coming on the
 monsoon from the Indian Ocean, the rains are precipitated by cold
 winds from the south-western antarctic current.³ The Benguela
 Highland constitutes a distinct climatic zone, as the fact of the
 altitude would lead one to infer. The adjoining and coastal regions

¹ Cf. H. W. Nevins, *A Modern Slavery*, chap. vi (New York: Harpers, 1906); also M. Burr, *A Fossicker in Angola* (London: Adelphi, 1933).

² A. J. H. Goodwin, 'Habitat', p. 34, in Schapera, *The Bantu-Speaking Tribes of South Africa* (London: Routledge, 1937).

³ See C. E. P. Brooks and S. T. A. Mirrlees, *A Study of the Atmospheric Circulation over Tropical Africa*. Meteorological Office. Geophysical memoirs no. 55 (London: H.M.S.O., 1932).

132 are divided into several sub-zones. A glance at the map¹ reproduced herewith will give a fairly good idea of the climatic regions. This map, apparently based entirely upon temperature averages and relative humidity in the localities for which such data are to be had,¹ is useful for an approximation of the principal zones and sub-zones. The names given to the several zones and sub-zones, however, are somewhat misleading, and the data on which the map is based are insufficient to assure accuracy.

The mean annual rainfall varies from 1,000 mm. (40 inches) to 1,500 mm. (60 inches) according to region² and locality. In the Highland the rains begin with a few showers during September and usually set in heavily during October. During November they increase in intensity and then suffer a break of from two to four weeks in December, January, or February. Then they continue until the end of April with sometimes a few showers in May. The heaviest fall is often in November or December, but sometimes in March. There seems to be some sort of cycle of morning, afternoon, and night rains, but I know of no study on this subject. Afternoon and evening rains are more common. Night rains seem to be more common towards the end of the season. Morning rains are least frequent. A day in which rain begins near (or before) 512 daybreak and continues well into the day is called in Umbundu 132 *ulembi*. On such a day agricultural work and travel are suspended. There is a custom that on such a day the first, after greeting, to (431) speak the word *ulembi* can claim a gift from the one to whom he says it. The number of days in which work or travel may be suspended on account of rain is relatively not large. The working day is customarily from early morning until mid-afternoon. Men often continue field-work later in the day than do women. The connexion of the working day with weather conditions is readily seen. 132 Whether the heavier rainfall occurs in November-December or in February-March, it is in March and April that transportation is most likely to be interfered with. That is the time of swollen

¹ See Dr. José de Oliveira Ferreira Diniz, 'As características climatológicas de Angola' (*Boletim Geral das Colónias*, 1930, no. 62, 63, pp. 3-15).

² See maps and charts of rainfall in H. F. Shantz and C. F. Marbut, *The Vegetation and Soils of Africa* (New York, 1923); also some figures on rainfall and temperature in J. C. B. Statham, *Through Angola, a Coming Colony* (London, 1922) and in O. Letcher, *South Central Africa*, chap. xiii (Johannesburg, 1932). More detailed treatment of the whole subject is given by Marquardsen u. Stahl, *Angola*, chap. v (Berlin, 1928).

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streams and washed-out bridges. Electrical discharges in connexion with storms are very common and often cause property and personal damage. In connexion with mean annual rainfall figures, the cycle of rainy and dry seasons is of importance. An annual rainfall of 50 or 60 inches may not seem unduly heavy save when it is realized that practically all of it falls during seven or even six months. It is this heavy seasonal rainfall which has made much of the Highland into what is known in South Africa as 'sour veld'—a type of pasturage relatively ill-suited for cattle raising.

The Benguela Highland is well within the tropics (between 11° and $14^{\circ} 30'$ South), but the altitude and the effect of the antarctic current combine to produce a decidedly moderate climate. The variations of temperature, however, are quite unlike those found in most regions having a 'temperate' climate. The régime of the rains, tropical position, altitude, and other factors combine to produce a peculiar set of temperature variations. The annual variation of temperature is relatively slight, a day's maximum is seldom above 90° F., it may be as low as 60° , but the more usual maximum is around 80° . The minimum of 32° or even 30° is sometimes reached in the winter (about 20 May–20 July),¹ but it seldom goes quite so low. A day's minimum has been registered as high as 63° , more usually the minimum goes to about 40° or 45° in winter and between 50° and 55° during the rest of the year. Daily variations are important. Greatest variations occur in winter with differences of as much as 42° often registered. During the rest of the year there is a considerable range of daily variation—sometimes as much as 40° and sometimes as little as 7° with usual variation of from 20° to 30° .² On the days when it rains or remains cloudy all day the slightest variations are registered. Such days are cold and disagreeable and a grate fire is almost a necessity.³

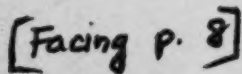
Environmental Factors

Differences of characteristic vegetation as between the Highland and the lower zones are striking. The most characteristic feature

¹ Ice forms nearly every winter—at least in small pools along the streams, and sometimes more generally. There are Umbundu words for hoar-frost (*ocikahoto*) and for hail (*ociwe*), but not for ice nor, of course, for snow.

² Figures compiled from records of the weather station of Currie Institute, Ndondi—elevation 1,800 metres (5,900 feet).

³ Grate fires are agreeable mornings and evenings during ten to eleven months of the year. In the winter they are a real necessity.



The two largest rivers flowing from the Highland are the Kwanza and the Kunene, both of which flow into the Atlantic Ocean. Between them are the Keve, the Balombo and the Katumbela. The Kubango rises near the source of the Kunene and flows southwards towards the Kalahari Desert.

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SOILS AND VEGETATION

The foundation of the plateau is a vast slab of primeval crystalline rock, which frequently outcrops in the form of isolated rocks or of massive peaks. Some of these outcrops remain bare, while others are hidden by laterite and soil formed by rock decomposition. Sediments overlying the rocks include unfossiliferous sandstones and conglomerates, considered to be of Palaeozoic age. Much of the soil is poor, in many areas impoverished by use and by erosion; there are however a few alluvial deposits, and on the whole the soil is of better quality than in the adjoining regions to the east, north and south.

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Differences in vegetation between the Highland and the lower zone towards the coast are striking. Characteristic feature of the coastal area is the baobab (*Adansonia digitata*) and in the better-watered areas tropical forests occur. The Highland proper was until recently well-covered with a variety of trees; today, however, except in isolated areas in Bailundu and other regions, grasslands have taken the place of forest and woodland. Native methods of agriculture and annual fires have caused much deforestation, and this has been accentuated by the demands of European settlement and of the Railway, which up to the present time uses principally wood for fuel.

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CLIMATE

The Highland is well within the Tropical Zone, but altitude and the effect of the south-western Antarctic current combine to produce a moderate climate. The annual variation of temperature is relatively slight; a day's maximum is seldom above 90°F, and may be as low as 60°, but the usual maximum is around 80°. The minimum of 32° or even 30° is sometimes reached in the winter (about May 20th - July 20th), but more usually the minimum is 40° to 50° in the winter, and 50° to 55° for the rest of the year. There is considerably daily variation, especially in the winter, when differences of 42° are often registered.

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Mean annual rainfall varies from 40 to 60 inches, according to region. In the Highland the rains begin with a few showers during September, increase during October and November, have a break of two to four weeks in December, January or February, and continue until the end of April. The heaviest falls are usually in November and December, occasionally in March.

TRADITIONS OF ORIGIN AND HISTORY (1)

The Ovimbundu people represent a fusion of diverse stocks, chiefly of the Southern Bantu and of the Congo or Central Bantu peoples. The ruling

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(1) This section is a summary of the detailed account given by Childs 1949, pp. 164-231.

II. GEOGRAPHICAL FACTORS

121 This chapter is intended to give an outline of the geographical conditions of Angola and to point out the way in which these have influenced the growth of Umbundu culture in all its aspects.

A presentation of geographical data is of primary importance here, and the actual relationship between the facts of geography and culture is a matter for gradual evaluation in the following chapters. The extent to which geographic determinism has entered into the cultural growth of the Ovimbundu is particularly well seen in chapter V, "Economic Life," which deals with industries, agriculture, domestic animals, fishing, and transport.

The area of Angola is a factor of importance, for the greater the extent of any country the more diversified will be the products and the cultural differences. This is particularly true if there are considerable differences in the elevation, because altitude modifies temperature and affects the distribution of rainfall.

131 Angola has an area of almost 500,000 square miles. The greatest length is a distance of about 900 miles from the river Congo in the north to the region of South West Africa. The greatest breadth is about 700 miles from the Atlantic Ocean on the west to the borders of the Rhodesian plateau in the east. This range over twelve degrees of latitude, from 5° S. to 17° S., in association with differences in altitude, have produced ecological regions which are described in the following paragraphs.

132 The northern part of Angola is ecologically a part of the Congo
311 basin, with conditions of heat and moisture giving rise to a dense
167 tropical flora. Owing to the presence of tsetse fly, the great heat, and the lack of open grasslands, such country is unsuited for the rearing of cattle, while agriculture, including cultivation of maize, is restricted to forest clearings. Manioc, palm trees, peanuts, and sweet potatoes are the chief products serviceable to man. This region was, according to the historical evidence of chapter III, the area in which the Ovimbundu moved before they entered the Benguela Highlands of central Angola. Parts of chapters III and X ("Historical Sources" and "Culture Contacts," respectively) are devoted to an analysis of the cultural factors of the Congo area from the year A.D. 1500 to the present day.

131 The central portion of Angola is the area most important in this research because it is the home of the Ovimbundu, whose cultural

GEOGRAPHICAL FACTORS

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growth is under examination. This central plateau, the Benguela Highlands, rises in places to a height of 5,000 feet, an altitude which reduces the heat of the tropics and so modifies the flora, discouraging some types of vegetation and encouraging others. Hostility of the highlands to palm trees and the banana is appropriately discussed when dealing with cultural losses; while the fostering effect of reduced temperature and the presence of wide expanses of open country on the growth of maize and the keeping of cattle is a cultural gain. [31] [133] [241]

The prevailing rains of Angola are from the northeast to the southwest; consequently the high plateau intercepts rain clouds which give an annual fall of sixty inches. This adequate rainfall is another factor which has affected economic life, density of population, communal welfare, and powers of expansion. [32]

The villages of the Ovimbundu are built on hillsides having a commanding view of the surrounding country. There is in the nature of the land a natural protection from enemies. In addition to this the Benguela Highlands are an admirable base from which expeditions both predatory and commercial might, and actually did set out eastward to the interior of Africa, and southwest to the cattle-keeping country. [361]

It is important to note that this central plateau is the watershed for four large river systems; the Kwanza to the northwest; the Cunene to the southwest; the tributaries of the Kasai to the northeast; and the Zambezi and its affluents to the southeast. Fishing, with attendant beliefs of a ritualistic kind, is of local importance; so also is the making of canoes. Moreover, the river valleys have marked out a natural means of communication in several directions. [33] [226]

In connection with the river system the biological factor of the tsetse fly is important, because the presence of the fly locally discourages human habitation and prevents the keeping of cattle. The exact distribution of the fly is imperfectly known, but *Glossinia palpalis*, the cause of sleeping sickness in human beings, also *Glossinia morsitans*, which carries disease to cattle, are both present along the Kwanza and parts of the other river (J. C. B. Statham, Through Angola, p. 294). [36] [231] [164]

The western coastal strip is a region of great aridity which has in some years no rainfall whatever, because the northeasterly rains have expended themselves on the high plateau. This region displays vegetation of the semi-desert type; namely, baobab trees, prickly acacias, euphorbias, and aloes. Population in this area is sparse, always nomadic, and in some places non-existent. The coastal strip [32] [37] [162] ∞ ∞

283 In the beginning a thread from the fluffy mass on the stick is fastened to a corn cob or to a potato, the weight of which keeps the thread taut (Plate XXXVI, Fig. 1).

[462] I have never seen a woman spinning and am informed that in former days the working of the loom was a task for men only.

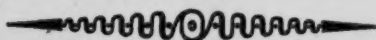
463 In presenting facts bearing on the economic life of the Ovimbundu
791 attention has been paid to the importance of ritual, specialization in industry, and division of labor on a sex basis. Clearly, the economic life is one of the fundamentals of social structure, while at many points it is a field in which the magician works.

● 132 Topography and climate have fixed certain conditions which, so
241 far as the Benguela Highlands are concerned, favor agriculture on an extensive scale, also the keeping of cattle. In the Benguela Highlands a moderate temperature, combined with sufficient rainfall, has produced a type of vegetation which provides timbers serviceable to the craftsman, together with bush that affords shelter for game.

128 The bearing of these economic facts on the probable origins of traits, and their assembly to form the tribal life of the Ovimbundu, is reserved for discussion in chapters dealing with culture contacts and cultural processes. In chapters X-XII the factual material presented here under "Economic Life" is correlated with what is known of similar activities in cultures surrounding that of the Ovimbundu.

CHAPTER V

VILLAGE ECONOMICS



The homeland of the Ovimbundu, the Benguela Highland, is mostly over 4,000 feet above sea-level. Rainfall is 50-60 inches a year, and the rainy season is from September to April.¹ In this season after a downpour there is frequently a cooling of the air, and the most intense heat comes just before the rainy season, during the dry spell that occurs in or about February, and just after the rains. Between the middle of May and the middle of July the nights and early mornings are bitterly cold but the days are pleasantly cool. After the middle of July the temperature gradually rises.

The soil of the Highland is poor; the Ovimbundu industriously cultivate beans, manioc, maize, potatoes, and tobacco. Less frequently they have coffee plants, fruit trees, and sisal. Occasionally wheat is grown but the ground is not really suitable. I am told that rice could be grown in the stream valleys. Four field types are recognized by the Ovimbundu—*otjumbo* (garden), *onaka* (stream-valley garden), *ombanda* (in ground sloping up from a stream), and *epya* (a field away from the streams on level ground).²

Umbundu country is well supplied with water in streams and rivers, and the Ovimbundu have built irrigation channels wherever possible. Cultivation in the stream valleys, that is, of the *onaka* type of garden, has only been practised since the 1870's or 80's.³ They are planted in August or the beginning of September, and give crops in December and January. The

¹ For an excellent account of Umbundu habitat see Childs, pp. 1-11.

² Albino Alves, *Dicionário Etimológico Bundo-Português*, Lisbon, 1931, Vol. I, p. 639 gives *ombanda* as a synonym of *onaka*.

³ Private information.